

Grants by Grant Cycle

Grants matching your search for 2012-13 *Tire-Derived Aggregate Grant Program (TDA2)*

Alameda County

Grantee: Waste Management of Alameda County, Inc.

Amount Awarded: \$278,118.00

Grantee Contact: Mr. Ken Lewis

Grantee Contact Phone Number: 510-613-2158

CalRecycle Grant manager: Loreto Tamondong

Project Summary: PROJECT TITLE: VISUAL BARRIER BERM, TRI-CITIES RESOURCE RECOVERY FACILITY (TCRRF)

PROJECT GOALS AND OBJECTIVES:

The primary goal of the project is develop a project to provide an opportunity to divert waste tires from landfill disposal, prevent illegal tire dumping and promote markets for applications of tire-derived aggregate (TDA) and provide civil engineering solutions to waste tire management.

HISTORY:

The proposed project will complement the historical transition from adjacent landfill operations to recycling and resource recovery activities at the Tri-Cities Resource Recovery Facility. Waste Management of Alameda County, Inc. (WMAC) is in the process of closing the former Tri-Cities Disposal and Recycling Facility in accordance with closure and postclosure requirements set forth in Public Resources Code (PRC) Section 43501 and Financial Assurances requirements set forth in PRC 43600, et. seq. The proposed grant project is not located on any property parcel that is currently or was formerly used for landfill operations. The subject property is part of property owned by WMAC that is now being converted through the land use approval process for use as a resource recovery facility (See Documents, CAD drawings). The proposed visual barrier berm will utilize TDA as one construction material to build a barrier to reduce visual access to the aggregate, asphalt, mulch and blending that is proposed for the project location. Detailed design and location maps are provided in the Documents sections of the grant.

CONSISTENCY WITH PLANNING DOCUMENTS:

On January 17, 2012, the Fremont City Community Development Department made a planning decision to approved Ordinance 01-2012, including Conditional Use Permit, P-2011-0100 (CUP), and approved a change in Land Use Designation for the proposed project property to Open Space – Flood Combining District and Planned District P-2011-100F. The latter Land Use Designation, for Planned District P-2011F, encompasses the newly approved Tri-Cities Resource Recovery Facility (TCRRF). The property approved for the TCRRF is owned by WMAC and is separately deeded from the closed Tri-Cities Landfill, located to the northwest of the subject property. Copies of cited planning decisions are included in the Documents section of this grant application. WMAC applies for this TDA grant under Category 1, of the eligible categories, Lightweight Fill, for the purpose of constructing the proposed visual barrier berm. The City of Fremont Community Development Department prepared and filed a Negative Declaration in compliance with the California Environmental Quality Act (CEQA), citing no significant environmental impacts posed by the TCRRF project. The proposed TDA project will mitigate environmental and aesthetic impacts of the resource recovery project by providing visual screening for outdoor operations, including concrete debris crushing, asphalt processing, mulching operations and processing and blending of organic, asphalt and aggregate products.

INNOVATIVE APPLICATION OF TDA FOR THE PROJECT:

Construction of the proposed visual barrier berm on the east side of the project property provides for an innovative use of TDA materials. Planning documents have been prepared and approved by the City of Fremont Community Development Department. Compliance with CEQA has been achieved through a Negative Declaration. Planning and environmental documents require actions to screen out visual access to proposed recycling operations. The project improves proposed planting of trees as a visual barrier by design and installation of the proposed berm, with trees on top. Trees and other vegetation will be planted on top of the visual barrier berm to further reduce line-of-site view of concrete, asphalt and organics processing and blending. The visual barrier berm will follow an engineered design that will ensure the integrity of the berm construction and provide for an innovative use of TDA materials that may otherwise be disposed.

TDA UTILIZATION AND COST-EFFECTIVENESS:

The project is proposed for implementation over an 18 month period, commencing approximately July of 2013, or when the Notice To Proceed is received from CalRecycle, whichever is earlier and end in December 2014, unless completed earlier. There will be accommodation for minimal delays during winter months during rainy season in 2013, when inclement weather may reduce or delay program implementation. WMAC estimates that 1,336,500 passenger tire equivalents (PTEs) will be processed into TDA for use in the project (13,365 tons). If the grant is awarded at the full requested amount of \$278,118 the average PTE funding allocated to the project will be \$0.21 per tire. See calculations below:

$$13,365 \text{ tons (x) } 2,000 \text{ lbs} = 26,730,000 \text{ lbs tire material } (\div) 20 \text{ lbs (PTE)} = 1,336,500 \text{ tires}$$

Or
1,336,500 tires (x) 20 lbs (PTE) = 26,730,000 lbs tires material ÷ 2,000 lbs(ton) = 13,365 tons
And
\$278,118 ÷ 1,336,500 tires = <\$0.21 grant funds per tire utilized

Note: Calculations based on averaged data. Measurement of TDA volumes as a representation of passenger tire equivalents (PTEs) is based on delivery weight by the producer of the TDA.

DESCRIPTION OF ENGINEERED DESIGN:

The earthen berm will be 2,000 feet in length, 15 feet in height, with 2:1 side slopes. The top of the berm will be 10 feet wide to allow for vehicular traffic and the planting of trees following construction. The core of the berm will be constructed with TDA. The TDA portion of the berm will have a 7 foot wide top and be 10 feet in height with 2:1 side slopes. A minimum of 1 foot lift thickness of TDA is to be spread and compacted per layer. Compaction may be achieved by at least three passes of a tracked bulldozer over the layer of tire chips, to achieve a relative compaction of 60%. The TDA portion of the berm should be enclosed with a geotextile layer prior to placement of the soil backfill. The TDA portion of the berm will be covered with a minimum of 5 feet of compacted soil on the top and side slopes sides.

FEEDSTOCK DEVIVERY ASSURANCE:

Certification of CA-sourced supply of TDA material that meets performance specifications is included in a Tire Derived Aggregate (TDA) Certification included in the Documents section. WMAC has contracted with the TDA supplier, Shamrock Tires, for over ten (10) years to provide shredded tires for various applications at the Altamont Landfill in Alameda County. Over the past five (5) years, Shamrock has annually delivered an average above one million (1,000,000) PTEs of shredded tires to Altamont Landfill. As the scope of operations at Altamont has scaled back in recent years, the TCRRF provides an additional market demand for utilization of waste tires for this and other innovative TDA project applications.

TRAINING AND TECHNICAL ASSISTANCE:

WMAC commits to work proactively with CalRecycle staff to provide opportunities to conduct training sessions for CalRecycle staff and collaborate on the information garnered from the implementation of the grant project. Should the grant be funded, the lead person for the Visual Barrier Berm will coordinate with the CalRecycle grant manager to develop the recommended training and technical assistance activities.

Total Awarded for County:\$278,118.00

Los Angeles County

Grantee: Chiquita Canyon, LLC

Amount Awarded: \$95,688.00

Grantee Contact: Mr. Steven Cassulo

Grantee Contact Phone Number: 661-257-3655

CalRecycle Grant manager: Victoria Rocha

Project Summary: Installation over the next two years of an estimated 8,500 linear feet of horizontal gas extraction trenches in a landfill application. Installation will occur during the summer cycles of the 2013 and 2014 construction seasons.

Total Awarded for County:\$95,688.00

Merced County

Grantee: Merced County Regional Waste Management Authority

Amount Awarded: \$109,193.00

Grantee Contact: MissJennifer Halpin

Grantee Contact Phone Number: 209-723-4481

CalRecycle Grant manager: Loreto Tamondong

Project Summary: The Highway 59 Landfill would like to use Tire-Derived Aggregate (TDA) instead of regular aggregate as backfill for 4-inch gas collectors. The landfill gas collection lines will be installed to "Phase 6a," which is the latest landfill cell at the Highway 59 Landfill and is active. Landfill Phases 1-5 already have landfill gas collection lines installed with conventional aggregate; Phase 6a currently does not have any gas collection lines installed.

Total Awarded for County:\$109,193.00

Monterey County

Grantee: Salinas Valley Solid Waste Authority

Amount Awarded: \$85,208.00

Grantee Contact: Ms. Jenny Mitchell

Grantee Contact Phone Number: 831-775-3018

CalRecycle Grant manager: Loreto Tamondong

Project Summary: The Salinas Valley Solid Waste Authority (Authority) is a Joint Powers Authority that administers the solid waste management system that serves the cities of Gonzales, Greenfield, King City, Salinas, Soledad and the unincorporated area of eastern Monterey County. The Authority's mission is to manage Salinas Valley solid waste as a resource, promoting sustainable, environmentally sound and cost effective practices through an integrated system of waste reduction, reuse, recycling, innovative technology, customer service and education. Procuring Tire-Derived Aggregate (TDA) Grant funding is consistent with the Authority's mission, vision, values and diversion goals.

The Authority owns and operates the Johnson Canyon Landfill, located near Gonzales California. It is the only active landfill in the Authority's jurisdiction, encompassing 163 acres and is estimated to have a remaining capacity of 2.9 million cubic yards. It is projected that if current waste disposal rates continue, the facility will provide capacity through the year 2040. The Authority also owns and maintains three closed landfills, Crazy Horse (Salinas), Jolon Road (King City) and Lewis Road (Uninc. Northern Monterey County).

In 2011, the Authority used approximately 305 tons of TDA for its leachate recirculation system as part of the Crazy Horse Closure Project. Incidentally, the unit cost for TDA is higher than crushed rock which is normally used for such applications. While this project did not receive grant funds, it demonstrates the Authority's commitment to reuse materials whenever possible.

For the Johnson Canyon Landfill, the Authority proposes using TDA as backfill for a horizontal landfill gas collection system in Module 1. Landfill placement of waste will resume in Module 1 within the next year or two. In anticipation of that schedule, the Authority planned for the installation of horizontal wells to compliment the existing vertical landfill well field in Module 1. This project would utilize the existing landfill gas header system and would enhance current methane emission controls, as well as capturing new emissions resulting from future waste. Construction is tentatively scheduled to begin by October 2013.

The Authority seeks funding for the installation of 11 horizontal wells over the grant period, with a TDA volume of 3,115 cubic yards. The Authority will cover any additional, unbudgeted costs as in-kind and intends to incorporate technical assistance recommendations from CalRecycle. If not funded, the Authority will absorb all costs associated with the installation of future landfill gas wells necessary to control methane emissions from Module 1.

If funded, the tire-derived aggregate grant program would provide the Authority with 1) greatly needed financial assistance; 2) an outlet for the reuse of local waste tires and; 3) an educational opportunity to promote the reuse of waste tires and the "closed-loop" concept. By capitalizing on grant funding, the Authority can potentially reuse more than 200,000 waste tires. Thus, grant programs such as this enable agencies like the Authority to reuse materials that otherwise may be permanently buried in the landfill, never to be repurposed.

Total Awarded for County:\$85,208.00

Riverside County

Grantee: Riverside County

Amount Awarded: \$150,748.00

Grantee Contact: MS. Kathleen Utter

Grantee Contact Phone Number: 951-486-3286

CalRecycle Grant manager: Victoria Rocha

Project Summary: Project proposal is for Type A Tire-Derived Aggregate (TDA) for landfill application of horizontal landfill gas collection wells at two (2) landfill sites within Riverside County. A total of 2,622 tons of TDA is proposed for use.

Total Awarded for County:\$150,748.00

Grant Count: 5

Grand Total for Selected Counties: \$718,955.00

